

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 , www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,683	09/15/2003	Melvin E. Wolfe JR.	28076/SV1094	9788
	7590 01/09/2007 GERSTEIN & BORUN	EXAMINER		
233 S. WACKI	ER DRIVE, SUITE 6300	PHAN, THIEM D		
SEARS TOWER CHICAGO, IL 60606			ART UNIT	PAPER NUMBER
· · · · · · · · · · · · · · · · · · ·			3729	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MO	NTHS	01/09/2007	DADED	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

			8			
-	Office Action Commence	Application No.	Applicant(s)			
		10/662,683	WOLFE ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Tim Phan	3729			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE of the may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	l. ely filed the mailing date of this communication. 0 (35 U.S.C. § 133).			
Status						
2a)⊠	Responsive to communication(s) filed on 30 October 2006. This action is FINAL. 2b) This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposit	ion of Claims					
4) ☐ Claim(s) 11-19 and 33-43 is/are pending in the application. 4a) Of the above claim(s) 33-43 is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 11-19 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement.						
Applicat	ion Papers					
9) 🗀	The specification is objected to by the Examine	r. .				
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority (under 35 U.S.C. § 119					
а)	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been receive I (PCT Rule 17.2(a)).	on No d in this National Stage			

Attachment(s)

1) 🔲	Notice of References Cited (PTO-892)
2)	Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date ____

4) L	J Interview Summary (PTO-413
	Paper No(s)/Mail Date

5) Notice of Informal Patent Application

6)		Other:	
----	--	--------	--

DETAILED ACTION

- 1. The amendment filed on 10/30/06 has been fully considered and made of record.
- 2. The rejection of claims 11-19 which were rejected in Office Action mailed on 7/24/06 under 35 USC 103; these claims are rejected under 35 USC 103 herein for substantially the same reasons as provided in the previous Office Action which is incorporated herein and made a part hereof.

Response to Arguments

3. Applicants' arguments filed 10/30/06 have been fully considered but they are not persuasive for the following reasons:

Applicants' arguments about the efficiency of the claimed invention (Remarks, page 7, last paragraph) and its superiority to others (Remarks, page 8, 1st paragraph) fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references of Sunaga et al in view of Matsuoka et al.

In response to applicants' arguments (Remarks, page 8, 2nd paragraph) that the examiner's conclusion of obviousness is based upon improper hindsight reasoning where the examiner cites

no reference that discloses the claimed element of "connecting an end portion of the first magnet wire directly to the switch" (Claim 11, line 6), it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPO 209 (CCPA 1971). Especially with respect to the prior art Matsuoka et al and Sunaga et al, Matsuoka et al teach the main, critical steps of the claimed invention of "laying a first wire (Fig. 3, 16) connection to an exit terminal and an input terminal (Fig. 3, 4 & 50) on a fuse (Fig. 3, 10); severing the first wire (Fig. 4, 16) between the input terminal and the exit terminal on the fuse" in order to efficiently mount a fuse at an intermediate portion of an existing circuit or connection (Col. 1, lines (Figs. 3 & 3, 10; col. 1, lines 41 & 42, lines 52-54), while Sunaga et al teach an existing circuit or connection between an end portion of the first magnet wire to the switch (Fig. 1, 41; col. 4, lines 24-27) by having the magnet wire terminated on circuit track of PCB, which connects to the switch for changing the current direction to the coils; it is therefore unbelievable to claim that an end portion of a magnet wire directly connected to a switch is patentably different from an end portion of a magnet wire connected to a switch through track signal on PCB as applicants insist that "electrically direct connection" is different from "electrically indirect connection through circuit track layout on PCB" and require proof for that evidence (Remarks, page 8, 2nd paragraph). Fortunately, any basic circuit network equation (Ohm's law) of a track signal of 0 resistance/impedance by wiring/track or any simple PCB

layout, which is designed to replace the cumbersome direct wiring connection of a prototype circuit built on a testing breadboard, is more than enough proof for any ordinary skill in the art to simply see that there is no basic, circuit-wise difference between an "electrically direct wire connection" and an "electrically indirect connection through circuit track layout on PCB".

The remainder of the claims, i.e. Claims 12-19, stand rejected with the reasoning for their rejections carefully articulated in the previous Office Action and in view of the responses in the paragraphs above.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

THIS ACTION IS MADE FINAL. Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee

Application/Control Number: 10/662,683 Page 5

Art Unit: 3729

pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In

no event, however, will the statutory period for reply expire later than SIX MONTHS from the

mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Tim Phan whose telephone number is 571-272-4568. The

examiner can normally be reached on M & Tu, 6AM - 2PM, and W & Th, 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tim Phan Examiner Art Unit 3729

tp January 3, 2007 A. DEXTER TUGBANÉ PRIMARY EXAMINÉR